Attorney Docket No.: Q75899

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A digital communication system comprising:

a channel state judging section for judging a-channel states of an inputted signal by using a-field syncs of the inputted signal; and

an equalizing section for compensating for a-channel distortion of the inputted signal by initializing a-parameters on the basis of the judged channel states,

wherein the channel states is one of comprise a static state and a dynamic state.

2. (currently amended): A digital communication system comprising:

a channel state judging section for judging a channel states state of an inputted signal by using a field sync of the inputted signal; and

an equalizing section for compensating for a channel distortion of the inputted signal by initializing a parameter on the basis of the judged channel state,

wherein the channel state judging section comprises:

a channel prediction section for predicting the channel state of the inputted signal by means of the field sync;

a plurality of buffers for storing state information regarding a plurality of channels predicted by means of a plurality of field syncs;

a calculating section for calculating a difference between the state information regarding N number of channels among the plurality of channels stored in N number of <u>buffers among the</u> plurality of buffers, wherein N is a natural number; and

a judging section for judging the channel state on the basis of the calculated difference.

- 3. (currently amended): The digital communication system as claimed in claim 2, wherein the judging section judges the channel <u>states</u> by means of a threshold value applied to the calculated difference.
- 4. (original): The digital communication system as claimed in claim 1, wherein the field sync is a PN sequence.
- 5. (currently amended): An operation method in a digital communication system, the method comprising the steps of:
- (1) judging a-channel states of an inputted signal by means of a-field syncs of the inputted signal; and
- (2) compensating for a-channel distortion of the inputted signal by initializing a parameters on the basis of the judged channel states,

wherein the channel states is comprise one of a static state and a dynamic state.

6. (currently amended): An operation method in a digital communication system, the method comprising the steps of:

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AMENDMENT UNDER 37 C.F.R. § 1.114(c) U.S. Application No.: 10/626,706

(1) judging a channel state of an inputted signal by means of a field sync of the inputted signal; and

(2) compensating for a channel distortion of the inputted signal by initializing a parameter on the basis of the judged channel state,

wherein step (1) comprises the steps of:

- (a) predicting the channel state of the inputted signal by means of the field sync;
- (b) storing state information regarding N number of channels predicted by means of N number of field syncs in N number of buffers, wherein N is a natural number;
- (c) calculating a difference between the state information regarding the N number of the channels stored in the N number of the buffers; and
 - (d) judging the channel state on the basis of the calculated difference.
- 7. (previously presented): The method as claimed in claim 6, wherein, in step (d), the channel state is judged by means of a threshold value applied to the calculated difference.
- 8. (original): The method as claimed in claim 5, wherein the field sync is a PN sequence.
- 9. (currently amended): The digital communication system as claimed in claim 2, wherein a number N of the buffers equals a number N of the channels and a number N of the plurality of field syncs.